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**Team formulation in practice: Forms, functions, and facilitators**

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Abstract

**Purpose:** Despite the popularity of team formulation, there is a lack of knowledge about workable implementation in practice. The purpose of this paper is to: (1) characterise team formulation, based upon examples from practice; and (2) identify factors perceived to support or obstruct workable implementation in practice.

**Design/Methodology:** An online survey recruited UK Clinical Psychologists (N=49) with experience in team formulation from a range of work contexts. Examples of team formulation in practice were analysed using Framework Analysis.

**Findings:** Four novel types of team-formulation with different functions and forms are described: case review, formulating behaviour experienced as challenging, formulating the staff-service user relationship, and formulating with the service-user perspective. A number of factors perceived to support and obstruct team formulation were identified including team distress, facilitating change, managing difference and informing practice. These were common across team-formulation types.

**Practical Implications:** The team-formulation types identified could be used to standardise team-formulation practice. Several common factors, including managing team distress, were identified as aiding workable implementation across team-formulation types. Future research should investigate the key processes and links to outcomes of team-formulation in practice.

**Originality/value:** This paper presents two original, practice-based and practice-informing frameworks: describing (1) novel forms and functions of team-formulation and (2) the factors supporting and obstructing facilitation in practice. This paper is the first to highlight the common factors that seem to facilitate workable implementation of team-formulation in practice.

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**Keywords:** Team formulation, case formulation, psychological formulation, multi-disciplinary team working

**Paper type:** Research paper

### Introduction

Team formulation is an increasingly popular practice within Clinical Psychology (Division of Clinical Psychology [DCP], 2011, 2015), reflecting the current prominence of Clinical Psychologists working psychologically within teams (Johnstone, 2014). The broad function of team formulation is to “enable team members to develop a shared psychological understanding of presenting difficulties; which summarises their nature, explains their development and maintenance, and guides intervention planning” (Geach, Moghaddam and De Boos, 2017, p.27).

Both professional (DCP, 2011) and regulatory bodies (Health and Care Professions Council, 2015) promote team formulation as a fundamental practice. However, the extant literature is limited to a small body of peer-reviewed research. Qualitative research in this area has examined staff experiences of team formulation, finding that attendees describe increased psychological understanding and empathy towards service-users (Beardmore & Elford, 2016; Harrison, Sellers, & Blakeman, 2018; Murphy et al., 2013; Summers, 2006). Quantitative research has sought to measure changes in staff attitudes following engagement with team formulation, with reports of reduced cynicism (Berry et al., 2015) and blame (Berry et al., 2009) towards service-users, and increased confidence (Ramsden et al., 2014) and tolerance (Berry et al., 2009).

However, a review of the team formulation literature found unstandardised definitions and implementation of team formulation in practice (Geach, Moghaddam and De Boos, 2017). The absence of a consistent understanding and practice of team formulation

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complicates identification of key processes that enable workable team formulation practice. Consequently, it is difficult to examine links between the processes and outcomes of team formulation as a singular practice – precluding meaningful evaluation and generalisation. There is a need to further understand: (a) the form, features, and functions of team formulation; and (b) the factors that may help or hinder team formulation in practice.

**Characterising Team Formulation in Practice**

There is little understanding of team formulation at a basic, descriptive level. The peer-reviewed literature conveys inconsistency in terms of how team formulation is implemented (Geach, Moghaddam and De Boos, 2017) and a range of practices with varying purposes have been described:

- 1. Structured psychological consultation aimed at improving service-effectiveness (Berry, Barrowclough and Wearden, 2009; Ingham, 2011; Ramsden, Lowton and Joyes, 2014; Berry *et al.*, 2015)
- 2. Semi-structured reflective practice meetings focused on the emotional impact of working with service-users (Davenport, 2002; Murphy, Osborne and Smith, 2013; Wilcox, 2013)
- 3. Informal sharing of ideas to encourage team members’ understanding of service-users (Christofides, Johnstone and Musa, 2012)

Given the increasing popularity of team formulation (DCP, 2015), it is plausible that there are further instantiations in practice that are not conveyed by existing literature.

**Factors that Support or Obstruct Team Formulation in Practice**

In addition to the paucity of evidence for team-formulation effects (Cole, Wood and Spendelow, 2015) there is a notable lack of consideration of putative mechanisms of effect

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(Ingham, 2015) or influencing contexts and setting conditions. Identification of key processes may be obfuscated by unstandardised team formulation implementation and evaluation (Geach, Moghaddam and De Boos, 2017).

Important targets for change have been theorised as the staff-service user relationship (Berry *et al.*, 2015) and staff attributions about presenting problems (Ingham, 2011). Beyond this, there has been little articulation of how desired effects could arise/contributory conditions or processes. An understanding of when team formulation may be most beneficial and how/why team formulation can be implemented would be advantageous to help harness factors that contribute to workable practice.

Taking these issues together, there is a lack of knowledge about the characterisation (Christofides, Johnstone and Musa, 2012) and factors which may facilitate and obstruct workable implementation (Ingham, 2015) of team formulation. Moreover, previous studies of team formulation have been mostly limited to single services, offering a somewhat-fractured understanding of current implementation. A synthesis of diverse practice-based instances where Clinical Psychologists have experienced workable implementation of team formulation will enable identification of the key characteristics and facilitators of this practice. A mixed deductive-inductive approach is apt to integrate extant research (Cole, Wood and Spendelow, 2015; Geach, Moghaddam and De Boos, 2017) with Clinical Psychologist accounts from practice to create a higher-order, theoretical understanding of how team formulation can be successfully applied.

### Aims

In the context of Clinical Psychology practice in the UK, this study aims to:

1. Characterise the perceived forms, functions, and outcomes of team formulation

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2. Identify factors that may support/obstruct perceived ‘best practices’ in team formulation – based on practice-based examples of successful and unsuccessful implementation

Method

Ethical Approval

Ethical approval for this study was granted by the first author’s institutional research ethics committee.

Participants

Purposive sampling of Clinical Psychologists aimed for maximum variation. This was sought in the initial placement of recruitment advertisements by using inclusive platforms to offset the likelihood that subsequent snowballing (chain-referral) may favour recruitment of individuals with similar characteristics. Demographic variables and the setting/service context of participants were monitored during recruitment to increase diversity where limited (e.g., recruitment was responsively focused on particularly groups according to incoming data) and to facilitate heterogeneous representation. Individuals were required to have internet access and consent to take part. Participants were included if they self-identified meeting two criteria:

- A qualified Clinical Psychologist working in the UK
- Experience of involvement in team formulation in practice

Potential participants from any employment sector, service, and setting were included. Other practitioner psychologists were excluded due to the differences in training and standards of proficiency related to formulation as outlined by the HCPC (2015). Participants were recruited via professional networks, social media, and snowballing (chain-referral). Participants were asked to report the length of team formulation experience as part of the survey.

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### Procedure

We conducted an online survey using the Qualtrics platform. An invitation email was disseminated via professional member networks and social media. Interested participants followed the survey link to view the opening page with a link to the participant information sheet. On this page, participants either accepted the consent form and continued or exited the survey.

### Survey Design

Demographic and background information – including age-bracket, gender, number of years qualified, and team-formulation experience – was collected using predetermined response-categories to allow for a description of the overall sample. The type of service and setting within which the participant practiced team formulation was also collected.

To meet this study's first aim, participants provided an example of team formulation they judged to be successful and could also volunteer a perceived unsuccessful example. Open questions were used to obtain data on the *form* ("please describe the process by which this team formulation was created" and "how (if at all) was this team formulation implemented in practice?") and *function* ("what was the purpose of this team formulation?") of team formulation examples. Participants were asked to report outcomes at three different levels: for the service user, staff team, and service. Open questions about the perceived supporting and obstructing factors (e.g., "In what ways did this example (not) work well?") were used to answer the study's second aim. In addition, participants were asked to report how they might have overcome any challenges that had arisen within the perceived successful example.

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Analysis

The epistemological position adopted for this research was critical realism, which acknowledges that our observations are limited in their capture of underlying reality. Critical Realism promotes identification of the contextual conditions which may influence and explain the manifestation of observable phenomena-of-interest from latent causal processes (Fletcher, 2017). This descriptive research sought to identify participant perceptions of the factors which obstructed or facilitated team formulation practice. In line with Critical Realism, the factors identified in this study were understood from a theoretical rather than a positivist cause-and-effect position.

Responses to free-text questions were analysed using Framework Analysis (Ritchie and Spencer, 1994) – chosen for its systematic, transparent analysis-process (Ritchie *et al.*, 2003). Both deductive (*a priori* concepts derived from team formulation research) and inductive (data-driven) processes were used to generate frameworks for organising and analysing data. The five steps of Framework Analysis (Ritchie and Spencer, 1994) were used to manage, describe and explain data and were used to answer each aim as outlined in Table 1:

1. Familiarisation: Immersion in raw data by reading and re-reading responses
2. Initial framework: Identifying key concepts (both *a priori* and from responses) to examine data
3. Indexing: Systematic application of framework to data
4. Charting: Abstracting and synthesising data to create thematic frameworks
5. Mapping and Interpreting: Presenting the range and nature of data. Creating types; analysing patterns, commonalities, and connections to answer research questions.

Quality considerations



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Framework Analysis benefits from a systematic approach to each stage of analysis, enabling transparency in the process from raw data to the framework tables (Ritchie & Spencer, 1994). Individual responses were coded (within-case) before indexing by theme (between-case). During indexing and charting, participant references were retained within themes to allow for tracing back to the original source. Arguably, data complexity is reduced in categorisation methods such as Framework Analysis, therefore, attention was paid to the anomalies and unique cases that emerged.

Supervision provided frequent and thorough discussions, to ensure coding was reasonable and justifiable, and enabled questioning of inferences and exploration of alternative interpretations. Discussing the coherence of frameworks, from their development through to the final matrices, formed credibility-checking throughout.

[Table 1 here]

### Results

#### Characteristics of the Sample

Of 120 people accessing the survey, 4 (3%) provided test-responses (not included), 16 (13%) clicked on the opening-page only, 34 (28%) partially-completed the survey, and 66 (55%) completed the survey. Of the 66 completers, 49 (41%) participants provided full, detailed examples of team formulation practice; these 49 participants form the sample for this paper – of whom, 32 also provided a perceived unsuccessful example.

The sample (N=49) was predominantly female (n=38, 78%) reflecting HCPC Clinical Psychology registrants (82% female). Further sample characteristics are shown in Table 2.

[Table 2 here]

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**Aim 1: Forms, perceived functions, and outcomes of team formulation**

Data regarding the function and form of 49 examples of perceived successful implementation of team formulation were analysed. In six cases, responses did not include sufficient data to enable categorisation (accounts were too vague or brief). Following Framework Analysis of 43 examples, seven team formulation types were identified. Four types are discussed below and summarised in Table 3:

- Case review (five examples)
- Formulating behaviour experienced as challenging (eleven examples)
- Formulating the staff-service user relationship (eleven examples)
- Formulating with the service user perspective (six examples)

Team-formulation types are presented as provisional categories based upon self-reported descriptions of practice and are defined primarily in terms of function (with description of forms serving each function). It is recognised that different forms may serve a single function (and vice-versa; i.e., forms and functions may vary independently). Reported outcomes are discussed for each team-formulation type. Such reports are inevitably limited by the aforementioned difficulties within our understanding of team formulation (e.g., paucity of understanding of process-outcome links and lack of agreement on desired outcomes).

**Case review.**

The case review category included five examples from a range of contexts such as inpatient forensic, and adolescent mental health and community services. The case review function, whether in the context of long-term or complex care, appeared to use team knowledge to understand current problems and was suggested to improve the team approach to future care. One notable exception aimed to review towards reaching a diagnostic

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conclusion – uniquely functioning to revise an existing formulation in relation to diagnostic concepts.

In each example, multi-disciplinary team (MDT) members' perspectives on the problem and key-worker involvement appeared central to creating and implementing the formulation. Three other common features emerged as consistent with the identified function of involving the wider team to drive actionable outcomes for care: (a) reviewing the service user's history/progress; (b) disseminating the formulation amongst the team; and (c) linking the formulation-session with other MDT-forums such as ward-round and team meetings.

Participants reported applying practical and structured formulation-frameworks, such as The Five Ps (Padesky and Mooney, 1990), and 'Roseberry Park' (Dexter-Smith, 2007) model. All participants perceived that the formulation appeared to help with generating actions (e.g., updating a care plan) which may link to the intended aim of improving care. In addition, increased staff understanding of the service-user, improved team communication and engagement with psychological intervention (e.g., acceptance of non-medical approaches and requests for psychological consultation) were claimed outcomes of this approach.

Taken together, the case review appeared to enable a pragmatic and collaborative formulation when there is a need for a clearer MDT approach. The practical focus was perceived to relate to changes to care. The significant MDT input was indicated as a key feature which was described alongside perceived improved team-functioning.

**Formulating behaviour experienced as challenging.**

The eleven participant-accounts of formulating behaviour experienced as challenging were from neuropsychology, intellectual/developmental disability (IDD), and older-adult settings, where links between cognitive functioning and behaviour might be salient.

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This team-formulation type was described to offer an idiosyncratic understanding of behaviour, particularly risk issues. ‘Making sense’ of the presenting problem and understanding ‘meaning’ or ‘function’ of behaviour was considered alongside person-specific factors such as ‘cognitive abilities,’ ‘developmental context,’ ‘unmet needs,’ and ‘extreme distress’.

Information from the staff-perspective was reported to provide the basis for the formulation (e.g., MDT assessment findings, incident records, and observations). Facilitation was illustrated as guiding the team to alternative understandings using CBT-based approaches and functional analysis. Clinical Psychologists reported both implicit and explicit strategies to change staff perceptions of the service-user:

- Humanising the person by “*Characterising the behaviour as a way to cope,*” highlighting the “*unmet need*”, or considering the patient’s views
- Locating behaviour in developmental context, e.g., how a service-user’s early experiences may lead to “*misinterpretation of staff intentions*”
- Educating others (including the service-user’s family in one example) on the link between cognitive difficulties and behaviour
- Challenging attributions e.g., “*opportunity for staff to formulate the impact of their opinions on their wider interactions with the person*”

Seven participants described different team responses to problem behaviour, e.g., “*opportunities for developing healthy relationships*”. Staff were suggested to have introduced new practices and were observed as compassionate and confident in their approach. Linked to this, service-users were described as appearing less distressed.

Other commonly reported outcomes were perceived increased staff understanding and amended care plans. Five services were perceived to function more safely: e.g., reduced

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physical restraint, sedative medication, and “*injury to nursing staff.*” There were some claims that the service functioned more effectively due to better relationships amongst the team and “*shorter admission time.*”

Formulating behaviour perceived as challenging appears to be a way for Clinical Psychologists to use psychological theory alongside staff observations to drive changes to staff attitudes and engagement with service-users.

**Formulating the staff-service user relationship.**

Eleven participants aimed to improve the therapeutic relationship between the team and service-user, including building or ending the relationship. The role of Clinical Psychology appears enhanced compared to other team-formulation types (e.g., preparing information before and after sessions, writing a letter to the service user), suggesting relational problems may be more difficult for teams to define, communicate, and make sense of.

Participants reported using interpersonal models – including cognitive analytic therapy, attachment, and systemic theory – where visual diagrams and theoretical concepts aided explanation of relational patterns. Reviewing the service-user’s personal history to contextualise interactions with the team/service and eliciting the emotion(s) influencing staff relational responses were described by participants to encourage a therapeutic relationship with the service-user.

Consistent with the reported function of this team-formulation type, six participants reported a perception that the staff-service user relationship improved. In four reports, the service-user was discharged from the service, although, it was unclear how this was linked to the team-formulation. Further, improved communication and change to teams’ emotional responses towards service-users were cited as perceived outcomes.

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Formulating the staff-service user relationship, driven by relational theories, was perceived to target staff awareness of patterns and emotional connections within this relationship. This approach was suggested to make a difference to how staff related to service-users and vice versa.

**Formulating with the service-user perspective.**

This team-formulation type was evidenced by six examples, mostly from inpatient settings, where formulations connected service-user and professional views to overcome barriers to engagement. In comparison to other types, a subtler facilitation approach was described to enable the inclusion of service-user views. Service-user views were reportedly ascertained prior to the formulation session and in one example, the service-user gave feedback on the formulation after the session.

Participants described reviewing the service-user's life history through a trauma perspective to generate links with current engagement difficulties. Most participants considered the relationship between service-users and the service at a broader level to explain issues such as repeat inpatient admissions. Correspondingly, targets for change were identified as prioritising treatment goals and changing the nature of the service-user's relationship with the service.

Following the team formulation process, service-users were described by participants as more engaged with staff and involved in treatment decisions. Perceived staff outcomes were reported as increased engagement with care provision (e.g., increased desire to support the person). It was claimed that care provision was meaningfully adapted to the person's needs and preferences (e.g., accommodating goals/barriers identified by the service-user and negotiating shared decision-making). Service-level changes included using the formulation with other services to promote better inter-team working.

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This type of team formulation incorporated the service-user's voice and appeared to enhance understanding of how the service-user might engage with services in general. The perceived impact was improved engagement with person-centred/collaborative care and sharing the formulation with other teams.

[Table 3 here]

In addition, three further team formulation types were identified:

- Consultation approach (five examples)
- Staff emotional support (two examples)
- Solution-focused reflective approach (three examples)

Consultation and reflective practice-based approaches were identified within the *a priori* framework from Geach, Moghaddam and De Boos, (2017). The solution-focused model of team reflection is a structured template which is cited in the literature as a known approach for team working (Norman, 2003) and team supervision (Sharry, 2007; O'Connell, 2012). When explored further, these three types did not reveal novel understanding beyond that articulated in existing literature. Therefore, prominence was given to unique team-formulation types that emerged outside of the *a priori* framework.

**Aim 2: What are the factors that may support/obstruct team formulation?**

Forty-nine successful and 32 unsuccessful examples of team formulation were used to answer Aim 2. In general, shared barriers and facilitators were reported across formulation 'types' which are provided in Table 4 and discussed below.

A key theme of distress arose as both a perceived supporting and obstructing factor and will be explored as a separate theme for this reason.

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**Distress.**

Distress amongst team-formulation attendees permeated team-formulation types and different settings. The nature of distress appeared to impact on perceived team-formulation success. Where distress related to lack of staff safety (due to violence, hostility, or interpersonal challenges), this was considered hindering. In contrast, concern about a service-user’s safety appeared motivating for teams to want to protect the person. Notably, strong emotional responses were not absent from successful team formulations but required sensitive management – through strategies such as giving team members permission to express difficult feelings; as well as modelling, contextualising, and normalising staff responses. A key intervention to harness distress constructively was responding to the team’s emotional experiences before addressing the service-user’s distress. Indeed, some used the space for reflection to process team distress or conflict about the service-user.

Distress emerged as a perceived barrier to forming a shared understanding – with uncontained anger or anxiety reducing team ability to explore emotional responses as part of the formulation. In two examples, the family’s distress (driven by dissatisfaction with care) had a perceived negative impact on the team formulation by limiting discussions and plans.

There were several discrete factors secondary to the overarching theme of distress that appeared to facilitate the success (or otherwise) of team formulation. High levels of distress obstructed teams’ engagement in the key tasks of the session, eroded session structure, and hindered collaboration. These links are discussed further below.

**When to implement team formulation**

*Preparation.* Practical considerations (e.g., management releasing team members from duties, payment for attending sessions outside of working hours) were considered helpful alongside opportunities for promotion and preparation.



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In contrast, lack of resources (time, staffing, management support) and high demands were described as hindering to team-formulation sessions. An absence of person-centred information or identification of the service-user to be discussed at the next team formulation obstructed opportunities for preparation. One participant overcame this by asking team members to pre-complete areas of the formulation, to save time and involve those who could not attend the session.

*Role of Clinical Psychology within the team.* The facilitator's existing relationship to the team was reported by participants whose team formulation centred on the staff-service user relationship. Further, the acceptability/value of Clinical Psychology in the wider service was identified as facilitative across team-formulation types.

Barriers to successful team formulation were described as perceived ruptures in this relationship or a lack of team engagement with psychological approaches in general, including a limited understanding of the nature/purpose of team formulation – suggesting the value of orienting the team before implementation.

**Facilitating team formulation**

*Facilitating a shared understanding.* Two factors appeared to support the development of a shared understanding: making links between past experiences and current difficulties and exploring the staff-service user relationship.

*Engaging the team.* Strategies to promote collaboration, such as drawing upon collective wisdom, appeared to foster engagement with formulation. Communicating the formulation through writing or drawing in-session, and sharing this outside of the session, was reportedly helpful. Unhelpful power dynamics within the team obstructed engagement.

*Managing difference.* Establishing a shared goal and respecting different viewpoints were identified strategies to manage different team-member contributions. Inattention to the

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variety of views/experiences, or alignment with one viewpoint only, was thought to cause conflict. However, in one example, it was perceived that the facilitator’s attempts to maintain different views was counterproductive: causing uncertainty and strengthening a non-psychological understanding of the service-user. Thus, managing different perspectives appears to be a difficult and complex task. Where fostering acceptance and integration of diverse viewpoints is obstructed, emphasising a commonly-held goal or team value may be helpful.

*Facilitating change.* Difficulties fostering change were reported when the team sought definitive answers or ‘quick fixes.’ Successful cases were marked by incorporation of the service-user’s views to promote empathy and a focus on the individual’s context. In addition, facilitators allowed the team to arrive at a new understanding through guided discovery and positive reframing.

*Informing practice.* A common supporting factor was the creation of a plan fostering a coherent and psychologically-informed approach to care that endured beyond the session. Barriers to informing practice-change were a task-focused or medical approach, difficulties linking discussion to formal care plans, and organisational limitations. In addition, there were two examples of misuse of the formulation in practice, which appeared to arise from unmanaged conflict within the session, highlighting the importance of addressing divergent views. Some participants reported the helpful use of follow-up support or revisiting the formulation-driven intervention plan.

[Table 4 here]

Discussion

This study aimed to describe: (1) the characterisation of team formulation based upon examples from practice; and (2) the perceived factors supporting and obstructing workable

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implementation in practice. The findings of each research aim will be discussed in turn and compared to existing psychological theory and literature.

### Characterising Team Formulation in Practice

We identified four types of team formulation with a range of facilitation features. These were formulating: as a case review; behaviour perceived as challenging; the staff-service user relationship; and using the service-user's views. This extends beyond the three team-formulation types identified from reviewing the team formulation literature: formulation-based consultation, reflective practice and informal team formulation (Geach, Moghaddam and De Boos, 2017). Practice-based accounts and research collectively convey a range of differential team formulation functions which could be used to inform standardisation of team formulation practice.

Given the areas of commonality between team formulation and other team forums, the specificity of team formulation is questionable. For example, (Nic a Bháird *et al.*, 2016) reviewed MDT meetings in community mental healthcare and found that discussing service-user care and improving teamworking were common functions. The team-formulation types identified in this study were perhaps uniquely characterised by the use of psychological theory and Clinical Psychology facilitation arguably requiring specialist (psychological) knowledge and competencies. Given the prominent stake Clinical Psychologists have in this practice, it could be argued team formulation functions as a vehicle to promote the value of Clinical Psychology within teams.

### Obstructing and Supporting Factors of Team Formulation in Practice

Perceived supporting and obstructing factors underpinning workable team formulation appeared to be common across team-formulation types. This suggests some factors underpinning workable team formulation are universal. One theoretical framework which

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offers a meta-perspective about how change may occur in team settings is Communities of Practice (CoP) . The CoP literature (Wenger, 1998) theorises a key process for change in an MDT context is allowing professionals with multiple (i.e., team and disciplinary) identities to learn to integrate and collaborate (Oborn and Dawson, 2010). The process of teams thinking together (Pyrko, Dörfler and Eden, 2017) and learning from both tacit knowledge and psychological theory appears to be key to understanding how change may occur within team formulation.

The management of distress amongst attendees appeared integral to team formulation success. Distress could obstruct team formulation by forestalling team engagement and openness to alternative perspectives. Dexter-Smith (2007) has observed that some team members resist or disengage from psychological approaches if perceived to be an additional demand, suggesting the need to consider team members’ emotional capacity and timing of team-formulation sessions.

The notion of working alliance is often applied to understand intervention successfulness (Bordin, 1979). The theme of distress amongst attendees could be understood as an expression of alliance-rupture: Reflecting conflict between facilitator versus team understandings of team-formulation task and goals. The ultimate task may be to understand and explain a service-user’s distress. However, study-participants conveyed that addressing and containing emotional distress amongst teams (and sometimes family members) was a crucial (prerequisite) task. There are parallels here with the reflective practice group literature where the facilitator’s engagement with, and understanding of, distress is considered to enhance learning (Smith, Youngson and Brownbridge, 2009; Binks, Jones and Knight, 2013).

Distress amongst attendees was described to limit opportunities for perspective taking and learning. During times of high stress, it is theorised that cognitive processes are reduced to

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automatic responses where decisions are made based upon immediate emotional states (Kahneman, 2003). This may suggest why some attendees were described as resistant to team formulation and sought straightforward solutions to problems.

Taken together, this study's findings and theoretical approaches offer clear implications for facilitation of team-formulation when attendees present as highly-distressed – this is considered further under clinical implications.

A proportion of team-formulations appeared to accommodate service-user voice or feedback, particularly in response to difficulties engaging service users with the service. Further, the service-user perspective was identified as a perceived facilitator of team-formulation. Such accounts appear congruent with best practice guidelines which promote collaborative formulation (DCP, 2011). However, it is notable that reports of service-user involvement were limited in both number and scope of involvement. Cited barriers to involving service-users in team formulation processes encompass: practical difficulties with involvement (Ingham, 2015), the need to formulate professional concerns, and the potential for increased service-user distress (Maltman & Turner, 2017). The function of the team-formulation (e.g., whether to formulate professional or service-user issues) appears to be important when considering service-user involvement.

### Critique

We used an online survey method to enable widespread recruitment. Due to the nature of self-report, participant accounts may be limited in their representativeness. The degree to which participant accounts correspond to actual practice and the degree of representativeness of this sample in relation to the broader population are both unknown. Similarly, the degree to which claimed outcomes correspond to actual occurrences is unclear. This links to a broader issue within team formulation research, reflecting difficulties mapping the intended

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aims onto specific and meaningful outcomes (Cole, Wood and Spendelow, 2015; Ingham, 2015).

Study results were derived from Clinical Psychologist only and the perspective of other stakeholders in team formulation (e.g., non-Psychologists, service-users, service managers) were not sought, reflecting a shortcoming of this research. Clinical Psychologists have a particular stake in team formulation, a practice seen as inherent to Clinical Psychology, and often facilitated and promoted by this professional group (DCP, 2015; Johnstone, 2014). Therefore, participants were potentially biased towards promoting the value of team formulation. We attempted to minimise this bias by asking for both positive and negative observations and experiences of team-formulation practices. However, research which goes beyond single-stakeholder perspectives to triangulate data sources is required.

Moreover, whilst this research was limited to understanding Clinical Psychologist approaches only, the results have potentially transferrable implications for other practitioner psychologists/professions engaged in team formulation practices.

Notwithstanding these limitations, this study is the first to analyse a collection of team formulation examples across multiple contexts. This research offers novel findings via identification of specific team-formulation types and shared factors of workable team formulation implementation. The knowledge generated expands the literature exploring team-formulation (Christofides, Johnstone and Musa, 2012; Wilcox, 2013) and offers a theoretical understanding of team formulation in practice more broadly.

**Clinical Implications**

Across team-formulation approaches, there appeared to be common facilitative strategies. These inform recommendations for practitioners:

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- Optimise conditions for team formulation by building positive relationships and openness to psychological approaches
- To elicit and draw upon the collective knowledge of attendees in the discussion as a way to promote collaboration between team members and encourage engagement
- Respond firstly to the team's emotional experiences, to engage reflective thinking and openness to new information
- Explore differing perspectives in the context of the staff-service user relationship or service-user's presenting problems
- Develop pragmatic psychological approaches to care, considering organisational constraints

### Research Implications

Future research could test the validity of purported supporting/obstructing factors – using observational data to measure these variables in practice and investigate any links to outcomes. Adopting study designs that allow for systematic measurement of the factors supporting/obstructing team formulation outcomes would be useful. This may inform the development of standardised definitions and models of team formulation to facilitate appropriate and sound evaluation of practice and support clinical practice guidelines specific to team formulation.

More broadly, research is needed to define and gauge 'effectiveness' of team formulation in practice. A hermeneutic single case efficacy design (Elliot, 2002), which aims to answer how and why an intervention may be effective, could be used to understand whether outcomes occur, and if so, whether they can be linked to significant events (either arising from the team formulation or other factors). The extent to which any outcomes can be

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linked to team formulation and non-team formulation factors could be assessed. Observation of process during team formulation sessions with the identified form, functions, and facilitating factors identified from this research could enable an in-depth understanding of which aspects of team formulation are working and why. This may help refine team formulation processes with a view to enhancing desired outcomes.

**Conclusion**

This study defines specific team-formulation functions and forms based on examples from practice. These may inform characterisation and standardisation of future team-formulation practice. Further, we propose common factors facilitating workable implementation across team-formulation types. This study conveys an understanding of the perceived workable implementation of team formulation which goes some way to understanding “successful” team formulation; however, understanding about “effective” team formulation remains limited. Future research is needed to validate and test the identified common and unique team-formulation factors as further discernment of process-outcome links is needed.



## TEAM FORMULATION IN PRACTICE

## References

- Beardmore, L., & Elford, H. (2016). Psychological formulation in a community learning disability team. *Learning Disability Practice*, 19(10), 28–33.  
<https://doi.org/10.7748/ldp.2016.e1799>
- Berry, K. *et al.* (2015) ‘Feasibility of award-based psychological intervention to improve staff and patient relationships in psychiatric rehabilitation settings’, *British Journal of Clinical Psychology*, 55(3), pp. 236–252. doi: 10.1111/bjc.12082.
- Berry, K., Barrowclough, C. and Wearden, A. (2009) ‘A pilot study investigating the use of psychological formulations to modify psychiatric staff perceptions of service users with psychosis.’, *Behavioural and cognitive psychotherapy*, 37(1), pp. 39–48. doi: 10.1017/S1352465808005018.
- Binks, C., Jones, F. W. and Knight, K. (2013) ‘Facilitating reflective practice groups in clinical psychology training: a phenomenological study’, *Reflective Practice*, 14(3), pp. 305–318. doi: 10.1080/14623943.2013.767228.
- Bordin, E. S. (1979) ‘The generalizability of the psychoanalytic concept of the working alliance.’, *Psychotherapy: Theory, Research & Practice*, 16(3), pp. 252–260. doi: 10.1037/h0085885.
- Christofides, S., Johnstone, L. and Musa, M. (2012) “‘Chipping in’: clinical psychologists’ descriptions of their use of formulation in multidisciplinary team working’, *Psychology and psychotherapy*, 85(4), pp. 424–435. doi: 10.1111/j.2044-8341.2011.02041.x.
- Cole, S., Wood, K. and Spendelow, J. (2015) ‘Team formulation: A critical evaluation of current literature and future research directions’, *Clinical Psychology Forum*, 275, pp. 13–19.  
Available at: [https://www1.bps.org.uk/system/files/user-files/Division of Clinical](https://www1.bps.org.uk/system/files/user-files/Division%20of%20Clinical)

## TEAM FORMULATION IN PRACTICE

Psychology/public/cat-1781\_-\_team\_formulation.pdf.

Davenport, S. (2002) 'Acute wards: Problems and solutions: A rehabilitation approach to in-patient care', *Psychiatric Bulletin*, 26(10), pp. 385–388. Available at:

<https://www.cambridge.org/core/journals/bjpsych-bulletin/past-title/psychiatric-bulletin/>.

Dexter-Smith, S. (2007) 'Integrating psychological formulations into inpatient services', *PSIGE Newsletter*, 97, pp. 38–42. Available at: <http://www.psige.org/public/files/PSIGE-newsletter-97.pdf>.

Division of Clinical Psychology (2011) *Good practice guidelines on the use of psychological formulation*. Leicester. Available at: [https://www1.bps.org.uk/system/files/Public\\_files/DCP/cat-842.pdf](https://www1.bps.org.uk/system/files/Public_files/DCP/cat-842.pdf).

Division of Clinical Psychology (2015) *Forum special issue: Team formulation, Clinical Psychology Forum*. Leicester. Available at: [https://www1.bps.org.uk/system/files/user-files/Division of Clinical Psychology/public/cat-1781\\_-\\_team\\_formulation.pdf](https://www1.bps.org.uk/system/files/user-files/Division%20of%20Clinical%20Psychology/public/cat-1781_-_team_formulation.pdf).

Elliott, R., 2002. Hermeneutic single-case efficacy design. *Psychotherapy research*, 12(1), pp.1-21.

Fletcher, A. J. (2017). Applying critical realism in qualitative research: methodology meets method. *International Journal of Social Research Methodology*, 20(2), 181–194. <https://doi.org/10.1080/13645579.2016.1144401>

Geach, N., Moghaddam, N. G. and De Boos, D. (2017) 'A systematic review of team formulation in clinical psychology practice: Definition, implementation, and outcomes', *Psychology and Psychotherapy: Theory, Research and Practice*, 91(2), pp. 186–215. doi: 10.1111/papt.12155.

Harrison, G., Sellers, E., & Blakeman, M. (2018). Team psychological formulations in

## TEAM FORMULATION IN PRACTICE

assertive outreach teams: Evaluating staff experiences. *British Journal of Mental Health Nursing*, 7(2), 75–80. <https://doi.org/10.12968/bjmh.2018.7.2.75>

Health and Care Professions Council (2015) *Standards of proficiency: Practitioner psychologists*. Available at: [http://www.hpc-uk.org/assets/documents/10002963SOP\\_Practitioner\\_psychologists.pdf](http://www.hpc-uk.org/assets/documents/10002963SOP_Practitioner_psychologists.pdf).

Ingham, B. (2011) ‘Collaborative psychosocial case formulation development workshops: a case study with direct care staff’, *Advances in Mental Health and Intellectual Disabilities*, 5(2), pp. 9–15. doi: 10.5042/amhid.2011.0107.

Ingham, B. (2015) ‘Team formulation within a learning disabilities setting’, *Clinical Psychology Forum*, 275, pp. 33–37. Available at: [https://www1.bps.org.uk/system/files/user-files/Division of Clinical Psychology/public/cat-1781\\_-\\_team\\_formulation.pdf](https://www1.bps.org.uk/system/files/user-files/Division%20of%20Clinical%20Psychology/public/cat-1781_-_team_formulation.pdf).

Johnstone, L. (2014) ‘Using formulation in teams.’, in Johnstone, L. and Dallos, R. (eds) *Formulation in psychology and psychotherapy: Making sense of people’s problems*. Hove: Routledge, pp. 216–242. doi: <https://doi.org/10.4324/9780203380574>.

Kahneman, D. (2003) ‘A perspective on judgment and choice: Mapping bounded rationality.’, *American Psychologist*, 58(9), pp. 697–720. doi: 10.1037/0003-066X.58.9.697.

Maltman, L.J. and Turner, E.L., 2017. Women at the centre—using formulation to enhance partnership-working: a case study. *Journal of Forensic Practice*, 19(4), pp.278-287. doi: 10.1108/JFP-02-2016-0013

Murphy, S., Osborne, H. and Smith, I. (2013) ‘Psychological consultation in older adult inpatient settings: A qualitative investigation of the impact on staff’s daily practice and the mechanisms of change’, *Aging & Mental Health*, 17(4), pp. 441–448. doi: 10.1080/13607863.2013.765829.

## TEAM FORMULATION IN PRACTICE

Nic a Bháird, C. *et al.* (2016) 'Multidisciplinary team meetings in community mental health: a systematic review of their functions', *Mental Health Review Journal*, 21(2), pp. 119–140. doi: 10.1108/MHRJ-03-2015-0010.

Norman, H. (2003) 'Solution-focused reflecting teams', in O'Connell, B. and Palmer, S. (eds) *Handbook of solution-focused therapy*. London: Sage Publications, pp. 156–168. doi: <https://doi.org/10.4135/9781446280478.n15>.

O'Connell, B. (2012) *Solution-focused therapy*. London: SAGE Publications Ltd. doi: <https://doi.org/10.4135/9781446280478.n16>.

Oborn, E. and Dawson, S. (2010) 'Learning across communities of practice: An examination of multidisciplinary work', *British Journal of Management*, 21(4), pp. 843–858. doi: 10.1111/j.1467-8551.2009.00684.x.

Padesky, C. and Mooney, K. (1990) 'Presenting the cognitive model to clients', *International Cognitive Therapy Newsletter*, 6, pp. 13–14. doi: <http://dx.doi.org/10.1176/appi.ajp.2009.09030306>.

Pyrko, I., Dörfler, V. and Eden, C. (2017) 'Thinking together: What makes Communities of Practice work?', *Human Relations*, 70(4), pp. 389–409. doi: 10.1177/0018726716661040.

Ramsden, J., Lowton, M. and Joyes, E. (2014) 'The impact of case formulation focussed consultation on criminal justice staff and their attitudes to work with personality disorder', *Mental Health Review Journal*, 19(2), pp. 124–130. doi: 10.1108/MHRJ-12-2013-0039.

Ritchie, J. *et al.* (2003) *Qualitative Research Practice: A Guide for Social Science Students and Researchers*. London: Sage Publications.

Ritchie, J. and Spencer, L. (1994) 'Analyzing qualitative data', in Bryman, A. and Burgess, R. (eds) *Qualitative data analysis for applied policy research*. London: Routledge, pp. 173–

## TEAM FORMULATION IN PRACTICE

195. doi: 10.1207/s15430421tip3903.

Sharry, J. (2007) *Solution-focused groupwork*. London: SAGE Publications. doi:

<https://doi.org/10.4135/9781446280379>.

Smith, F., Youngson, S. and Brownbridge, G. (2009) 'Personal development in a group setting', in Hughes, J. and Youngson, S. (eds) *Personal development and clinical psychology*. Chichester: Blackwell Publishing Ltd, pp. 124–147.

Summers, A. (2006). Psychological formulations in psychiatric care: staff views on their impact. *Psychiatric Bulletin*, 30(9), 341–343. <https://doi.org/10.1192/pb.30.9.341>

Wenger, E. (1998) *Communities of practice: Learning, meaning, and identity*. Cambridge: Cambridge University Press.

Wilcox, E. (2013) 'Biscuits and perseverance: reflections on supporting a community intellectual disability team to reflect', *Advances in Mental Health and Intellectual Disabilities*, 7(4), pp. 211–219. doi: 10.1108/AMHID-03-2013-0022.

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Table 1.  
*Framework Analysis steps (Ritchie & Spencer, 1994) applied to current research aims*

	Familiarising	Initial Framework	Indexing	Charting	Interpreting
<b>Aim 1.</b> Team formulation types	Team formulation examples read for identification of broad commonalities	Key concepts developed from responses and <i>a priori</i> categories (function, key features, perceived outcomes)	Based on detailed coding, examples were categorised into typologies based on common functions	Examples within each typology were further coded to populate the framework (across case comparisons)	Framework of typology: Common and unique features identified
<b>Aim 2.</b> Obstructing and supporting factors	Responses organised into supporting and obstructing factors	Responses further categorised into moderators and mediators	Based on detailed coding, factors were categorised into themes	Examples within each factor synthesised and analysed to populate framework	Framework of supporting and obstructing factors.

Table 2.

*Characteristics of the sample*

	Successful Example (N=49)		Unsuccessful Example (n=32)	
	Count	%	Count	%
<b>Female</b>	38	77.6	24	75.0
<b>Age (Years)</b>				
24-30	05	10.2	03	9.4
31-40	23	46.9	18	56.3
41-50	14	28.6	07	21.9
51-60	05	10.2	02	6.3
61-70	02	4.1	02	6.3
<b>Team Formulation Experience (Years)</b>				
3 to <6 months	01	2.0	00	0.0
6 to <12 months	03	6.1	02	6.3
1 to <2	06	12.2	04	12.5
2 to <3	07	14.3	05	15.6
3 to <5	12	24.5	09	28.1
5 to <10	11	22.4	08	25.0
10 to <15	04	8.2	02	6.3
15 to <20	03	6.1	01	3.1
<20	02	4.1	01	3.1
<b>Training in Team Formulation</b>				
Yes	20	40.8	15	46.9
Unsure	05	10.2	02	6.3
No	24	49.0	15	46.9
<b>Years qualified as a Clinical Psychologist</b>				
0 to <5	18	36.7	13	40.6
5 to <10	9	18.4	6	18.8
10 to <20	15	30.6	10	31.3
20 to <30	4	8.2	1	3.1
30 to <40	3	6.1	2	6.3

Table 2 Continued.  
*Characteristics of the sample*

	Successful Example		Unsuccessful Example	
	(N=49)		(n=32)	
Population	Count	%	Count	%
Adult mental health	14	28.6	11	34.4
Intellectual/developmental disability	10	20.4	06	18.8
Older adults	09	18.4	07	21.9
Children and adolescents	06	12.2	04	12.5
Forensic/offender health	06	12.2	01	3.1
Physical health psychology	02	4.1	01	3.1
Neuropsychology	02	4.1	02	6.3
Total	49	100	32	100
Setting				
Community	20	35.7	13	34.2
Outpatient/clinic	02	3.6	00	0.0
Outreach/liaison	03	5.4	02	5.3
Inpatient	24	42.9	20	52.6
Inpatient secure forensic	05	8.9	01	2.6
Other <sup>1</sup>	02	3.6	02	5.3
Total <sup>2</sup>	56	100	38	100
Sector				
NHS	44	89.8	28	87.5
Independent provider	02	4.1	01	3.1
Other <sup>3</sup>	03	6.1	04	6.3
Total	49	100	32	100

*Note.* n = subgroup of the sample. <sup>1</sup>Other: Children Looked After Social Care Team, Offender Health. <sup>2</sup>Participants could select more than one option. <sup>3</sup>Other: NHS and independent provider, NHS and Charity, Social Care Team.



Table 3.

*Team formulation typology*

Function	Facilitation	Features	Target of Change	Reported Outcomes
<b>Case Review (n=5).</b> Review long-term/complex care. Identify team approach	Collaborative with MDT	<ul style="list-style-type: none"> <li>• Inviting MDT perspectives (5)</li> <li>• Involving key workers (5)</li> <li>• Disseminating formulation throughout team (4)</li> <li>• Linking to other team forums (3)</li> <li>• Reviewing SU's history (3)</li> </ul>	Structured models for MDT use: 'Five Ps' & adapted CBT Agreeing tangible actions focused on care	<b>SU:</b> Changes to care (4), perceived to feel listened to (3) <b>Staff:</b> Improved team functioning (4), increased understanding of SU (3) <b>Service:</b> Increased engagement with psychological approaches (2)
<b>Formulating Behaviour Experienced as Challenging (n=11).</b> Understanding risk/problems in the context of the person	Guiding team towards directly and indirectly	<ul style="list-style-type: none"> <li>• Based on professional observations or assessments (9)</li> <li>• Changing staff perceptions of the person (8)</li> <li>• Planning alternative responses to the behaviour (7)</li> </ul>	Adapted CBT and Functional Analysis. Changing staff appraisals of (and responses to) the behaviour/person	<b>SU:</b> Appearing less distressed (4), amended care plans (8) <b>Staff:</b> Altered perceptions (5) and responses (6), increased understanding of behaviour (7) <b>Service:</b> Improved relationships (4), safer practice (3)

Table 3.  
*Team formulation typology*

Function	Facilitation	Features	Target of Change	Reported Outcomes
<b>Formulating Staff-SU relationship (n=11)</b> Improve therapeutic relationship between team and SU	Psychologist highly involved before, during and after the session	<ul style="list-style-type: none"><li>• Exploring personal history as context for SU’s current presentation (8)</li><li>• Formulating relational patterns (8)</li><li>• Understanding team’s emotional responses to SU (7)</li><li>• Linking to individual therapy (6)</li></ul>	Interpersonal models to facilitate alternative responses to SU	<b>SU:</b> Improved staff-SU relationship (6) <b>Staff:</b> Improved communication (5), altered emotional responses (7) <b>Service:</b> Discharged from service (4)
<b>Formulating with SU perspective (n=6).</b> Connect SU and team perspectives to drive service-level changes	Subtle facilitation to enable collaboration between SU and team	<ul style="list-style-type: none"><li>• Including SU perspective (6)</li><li>• Linking team and SU views in formulation and plan (6)</li><li>• Reviewing personal history to understand impact on engagement (5)</li><li>• Explaining SU relationships with services (5)</li></ul>	‘Five Ps’ with trauma and attachment theory. Changing the nature of the relationship between SU and service	<b>SU:</b> Increased SU engagement (5) <b>Staff:</b> Meaningfully tailored interventions (4), increased empathy (3) <b>Service:</b> Collaborative care planning (2), enhanced inter-team working (2)

*Note.* SU: service user; CBT: cognitive behavioural therapy

Table 4.

*Factors perceived to support and obstruct team formulation*

<b>Factor</b>	<b>Supporting</b>	<b>Obstructing</b>
<b>Distress</b>	Enabling expression of distress and exploring dynamics Explaining staff emotional responses in the context of work with SU Providing emotional support Team distress relates to SU safety	Distress perceived to reduce team attendance, engagement and ability to empathise and reflect Team feel unsafe when working with SU (e.g., hostility, violence, threats or interpersonal challenges)
<b>Setting Conditions</b>		
<b>Preparation</b>	Arrangements and incentives enable attendance (e.g., flexible delivery, adequate time/space, management support) Knowledge of SU (e.g., thorough assessments or completing formulation sections prior to session)	Limited resource (time, staffing, management support) Lack of contextual/person-centred information about SU
<b>Relationship between psychology and team</b>	Existing positive relationship between psychology and service Team's level of psychological mindedness (e.g., understanding of chosen model and openness to psychological approaches)	Existing negative relationship between facilitator and team Low level of team engagement with psychological approaches Team lacks understanding or appears resistant to psychological ideas

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Table 4.  
*Factors perceived to support and obstruct team formulation*

Factor	Supporting	Obstructing
<b>Within-Session Factors</b>		
<b>Shared understanding</b>	Contextualising and explaining SU difficulties	Contextual information is overlooked or unknown
	Understanding staff-SU relationship	Team appear unwilling or unable to consider alternative perspectives
<b>Engagement</b>	Accessibility of formulation to enable shared ownership (e.g., drawing or sharing document)	Team dynamics limit engagement
	Collaborating with team e.g., using collective team knowledge to make meaning	Limited collaboration with team
<b>Managing difference</b>	Establishing a shared team goal	Different views or experiences are not explored leading to a lack of shared understanding or conflict
	Valuing and respecting different views	Facilitator aligns with a sub-group
<b>Facilitating change</b>	Including SU views	Team desires definitive answers or solutions
	Empowering team to consider own needs or solutions	
<b>Informing Practice</b>	Psychologically-driven plan which informs practice	Limited practical or care-planning implications (e.g., medical focus, list of problems)
	Agreement on strategy for consistent/coherent intervention	
	Opportunity for non-medical approaches	Service constraints limit how formulation is implemented
	Providing support for implementing formulation in practice	Isolated or misuse of team formulation

Table 4.

*Factors perceived to support and obstruct team formulation*

Factor	Supporting	Obstructing
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*Note.* SU: service user

Responses to reviewers

In the Table below, we have itemised comments from the reviewers (first column) and provided our responses (second column, noting page-numbers for changes made). We have also indicated changes within the revised manuscript (as purple coloured text).

Reviewer #1:	
The paper addresses the novel topic of how to implement formulations in real world settings and has clinical value. However, I did feel the study was somewhat limited by the online survey methodology which prevented indepth exploration of key issues. I would have expected a larger sample given the lack of depth of the analysis.	As previous studies of team formulation have been mostly limited to single services, the survey method allowed for efficient data collection from a heterogeneous (in terms of work context) and geographically-dispersed professional group. Moreover, the survey method enabled anonymous participation. This was an important consideration for the optional section regarding unsuccessful team formulation implementation and negative outcomes.
Abstract: It would be helpful to get more of a hint of the meat of the findings in the results or conclusions section	We have added key findings to the Results subsection of the Abstract (p. 1)
The introduction talks about moderators and mediators but it not clear how these relate the to aims of the study. Was it the aim of the study to identify mediators too? It looks like it from the results but it isn't in the aims	For clarity, we now refer to 'supporting' and 'obstructing' factors, in line with the wording of the aims throughout the manuscript – and have removed complicating references to moderators/mediators
There is already quite a bit of qualitative work looking at how staff perceive team formulation (e.g. Summers et al 2006; Berry et al 2017 to name but a few), which also touch on the idea of implementation. I think the introduction would benefit from more details about this related work and clarify more precisely how their study builds on what has been done before.	We have included further detail of previous research in the Introduction (p. 2).  We have added further details of how this study builds on previous research (p. 4).
The authors describe the sample as purposeful it is sounds more like convenience sampling to me rather than selecting participants on a more systematic basis.	We have added details of the sample strategy (maximum variation sampling) on p. 5.
As it stands I don't think we can conclude that the authors sampled the most meaningful group of people. If the questions are around implementation I think it would be more helpful to identify a much broader range of stakeholder. I think the authors need to be clear that the findings only tell part of the story in terms of implementation ie only from the perspective of those that deliver formulation not those that receive or commission it.	We have expanded on this limitation in the Critique subsection of the Discussion (p. 21).

1 2 3 4 5 6	It isn't clear from the method how the authors ensure the rigor within their data analysis or there is no section on the epistemology or reflexivity.	Details of epistemology and quality considerations have been added to the analysis subsection (p. 7 - 8).
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	<b>Results</b> I think the write up of the results needs to be much tentative. E.g. for each formulation type it reads as if these are a series of recommendations when in fact they are just ideas generated from a handful of cases. Given my reservations about the quality of the data, I think it might be just helpful to just describe different types of formulations but in a bit less detail in the first section of the results. I also think the numbers aren't that meaningful given we are talking about so few cases overall.	We have reduced the detail of Aim 1 results and increased tentative language throughout. The results are initially introduced as tentative in nature and are prefaced as limited data from a sample of CPs who are practicing team formulation. In the Discussion (p. 20), we have made explicit that accounts may be limited in their representativeness with regards to (1) participants' own practice (unknown level of correspondence between self-report and actual practice) and (2) practice more broadly (unknown representativeness of this sample in relation to broader population).
25 26 27	In terms of structure, it would make more sense to me if the description extra three types went at the end of the subsection	We have moved this text to the end of subsection as suggested.
28 29 30 31 32 33 34 35	My other point about the results relates to my previous point about the aims. The identification of moderators and mediators is interesting but it isn't clear how these relate to factors that support or obstruct TF. Surely factors that support or obstruct are moderators? Mediators are the way in which the intervention is perceived to work.	Amended as above
36 37 38 39 40 41	<b>Discussion</b> I felt this clinical implication could be more specific 'Harness collective knowledge to promote collaboration and engagement'. I didn't really know what it meant.	We have reworded this implication (p. 22)
42 43 44	The research implications is too brief and I am not really sure how they authors propose to go about observing formulation or evaluating it.	We have provided additional implications and suggested methodology for future research (p. 22)
45 46 47 48 49 50 51 52	A significant part of the discussion focuses on distress at the expense of discussing other interesting moderators and mediators. If the section in the results describing the models could be reduced then it would leave more room for the discussion of other factors and future clinical and research implications.	We have included a paragraph on (lack of) service-user involvement (p. 20).
53	<b>Reviewer #2:</b>	
54 55 56 57 58 59 60	This is an interesting paper in an under-researched area therefore making it suitable for publication. I do feel that it is unnecessarily narrow in focus (Clinical Psychology only) and misses the voice of the Service User	Please see responses below which address these areas.

<p>I wonder if a greater amount of literature on group formulation could have been sourced if the definition of formulation had been broadened (e.g. collaborative risk formulation).</p>	<p>We utilised a working definition of team formulation that has some specificity but is not over-inclusive. The selected definition was informed by a systematic review of the team formulation literature.</p> <p>Moreover, our data reflect the practice of risk-formulations. Importantly, these are based on participants working within the scope of the selected definition of team formulation and identifying varied applications.</p>
<p>However, it does seem that consideration of service user involvement in team formulation is largely missing - both from the methodology and from the results. Best practice guidelines for formulation now include utilising the voice and opinions of the Service User - including them in the development of the formulation where possible. It would have been useful to include consideration of this.</p>	<p>Regarding methodology, we considered service-user involvement <i>a priori</i> and provided opportunity for participants to comment on this; for example, prompting participants to describe how the formulation was created and who inputted into the process/product.</p> <p>Where there were references to service-user involvement, these are highlighted in the results: E.g. formulation type 'formulating with the service-user perspective.'</p> <p>As service-user involvement was not consistent throughout responses, the results may reflect limited service-user involvement in team formulation in practice.</p> <p>We have commented on this with an additional paragraph in the discussion with reference to extant literature (p. 20).</p>
<p>I wonder about the reasoning behind limiting this to Clinical Psychology specifically rather than including all Applied Psychology areas (e.g. this is common practice in Forensic and Counselling settings) - where there are obviously overlaps in terms of the discipline of psychology being practiced.</p>	<p>Whilst the focus of this research was in understanding Clinical Psychologist approaches, and inclusion criteria were circumscribed to this effect, the results have potentially transferrable implications for other practitioner psychologists/professions engaged in team formulation practices. We have added this comment into the Discussion (p. 21).</p>